

DETAILED ACTION

Drawings

1. Figs. 2-7 are objected to because they do not illustrate the invention in a way that is accessible to one of ordinary skill in the art. It is unclear what is being illustrated and how the drawings relate to the claimed subject matter. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

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2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
4. Claims 1, 4, 6, 7, 9, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muller (DE20302249 – English translation) in view of Stubler et al. (6,487,757) and Sunderland (1,910,269).
5. Regarding claim 1:
- a. Muller discloses a building protection system including:
 - i. Wire cables maintained under tension (40, Fig. 3).
 - ii. The cable ends of a predetermined cross-sectional size and material (40).
 - iii. Clamping bodies that has a guide shaped such that the reaction force of the clamping body increases with an increase in tensile force (42; p. 8, 1-3).

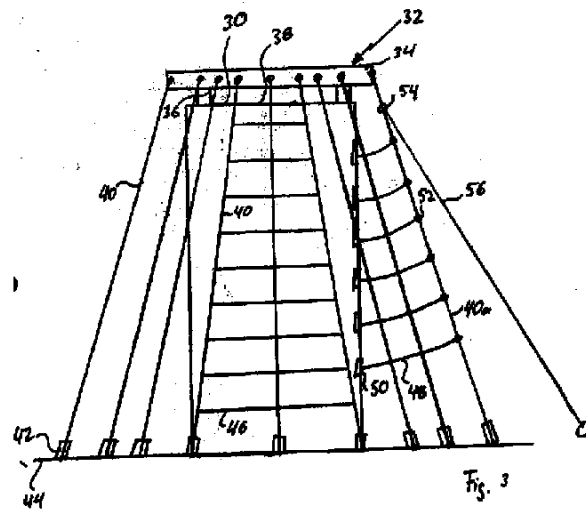
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- b. Muller does not expressly disclose that the clamping body guide has a frustoconical surface that narrows progressively in the direction of the tensile force, that the body has a passage receiving the cable end, or that the clamping bodies are made of a harder material than the cable ends.
- c. Stubler discloses a system for connecting a cable to a ground structure that includes a clamping body (26, Fig. 4) with a guide (25) having a frustoconical surface that narrows progressively in the direction of the tensile force, and an inner guide surface material that is harder than the wire cable material (Fig. 4).
- d. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to replace the clamping body of Muller with the clamping body as taught by Stubler, as the two clamping bodies are art-recognized equivalents.
- e. The examiner further notes that it would have been obvious to a person of ordinary skill in the art to replace the clamping body of Muller with the clamping body as taught by Stubler, since the frustoconical body-guide relationship ensures a strong connection between the cables and clamping body.
- f. Muller/Stubler does not expressly disclose cable extensions, that the material of the clamp body is harder than that of such an extension, or that the extension has a continuous broadening that is engaged with the inside surface.

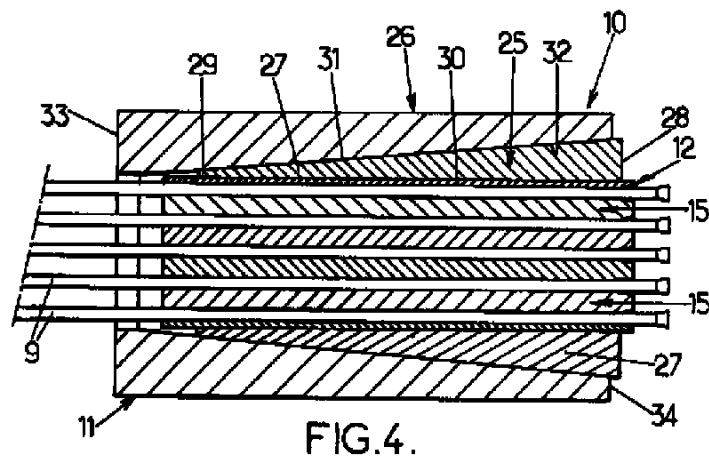
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- g. Sunderland discloses a clamping body (D, Fig. 1) having a passage receiving a wire end extension (C), the clamping body being harder than the material of the cable extension (p. 1, 53-54) and the extension engaging the body with a continuous broadening (C).
- h. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to provide the cables of Muller/Stubler with broadening cable extensions of a softer material than the clamping body, in order to provide the cable with more 'give' under increased tension while ensuring the cable is not pulled loose.
- i. The examiner notes that the broadened cable extension of the combination is engaged with the inside surface of the clamping bodies through the guides
25.
- j. The examiner further notes it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

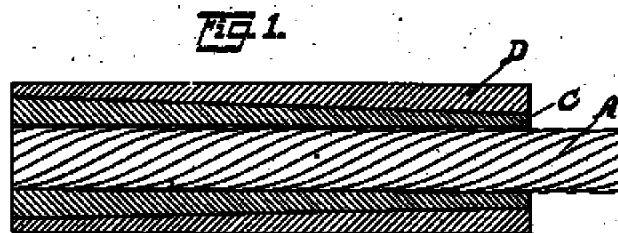
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Reproduced from Muller



Reproduced from Stubler



Reproduced from Sunderland

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6. Regarding claim 4, Muller/Stubler/Sunderland as modified above discloses a building protection system with conical clamping body, with the combination further disclosing a cable that is plastically deformed when relative movement occurs through the guide in the direction of the tensile force.
 - a. The examiner notes that once the cables of Muller/Stubler/Sunderland are placed in tension, any additional force in the tensile direction results in plastic deformation of the cables.
7. Regarding claim 6, Muller/Stubler/Sunderland as modified above discloses a building protection system with conical clamping body, with Stubler further disclosing a guide comprised of a plurality of clamping jaws mounted at individual mutual angles (25).
8. Regarding claim 7, Muller/Stubler/Sunderland as modified above discloses a building protection system with conical clamping body, with Sunderland further disclosing cable extensions comprising strip-like bodies (C).
9. Regarding claim 9:
 - a. Muller/Stubler/Sunderland as modified above discloses a building protection system with conical clamping body, with Stubler further disclosing multiple cables held by a single sleeve (9, Fig. 4).
 - b. Muller/Stubler/Sunderland does not expressly disclose that these cables have different breakage strengths or reaction forces.
 - c. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the cables of the combination by giving

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some a different breakage strength, since it is well-known to provide cable bundles with one cable of lesser strength in order to provide a warning (via the snapped cable of lesser strength) that the bundle has been placed under too much tension.

10. Regarding claim 17, Muller/Stubler/Sunderland as modified above discloses a building protection system with conical clamping body, with Stubler further disclosing wire cables under tension forming a net structure (40, 46).

11. Claims 1 and 10-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jackson (2003/0115830) in view of Morell (3,952,377) and Sunderland (1,910,269).

12. Regarding claim 1:

a. Jackson discloses a building protection system including:

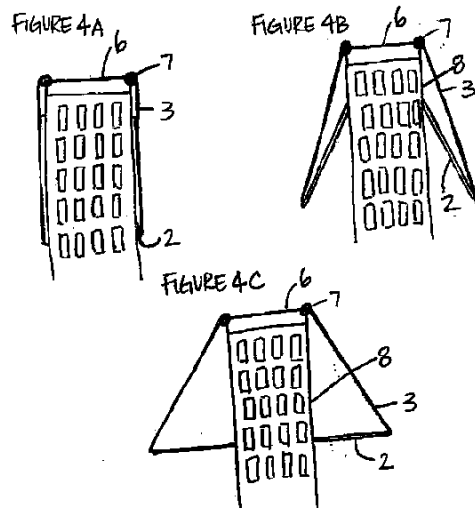
- i. Wire cables maintained under tension (3, Fig. 4).
- ii. The cable ends of a predetermined cross-sectional size and material (3).
- iii. Cables attached to a support beam (2).

b. Jackson does not expressly disclose how the cables are connected to the support beam, and specifically does not mention that the cables are held by clamping bodies having a guide shaped such that the reaction force of the clamping body increases with an increase in tensile force.

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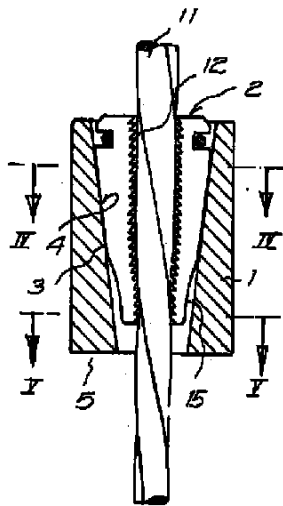
- c. Morell discloses cable gripping/clamping bodies (1, 2, Fig. 2) that have a guide passage (4) receiving the cable end (11 held by 2) and shaped such that the reaction force increases proportional to the tensile force.
- d. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the cable-beam attachment of Jackson by using clamping bodies as taught by Morell, in order to ensure a stronger, more secure connection between the members by using a connection means that is well-known in the art.
- e. Jackson/Morell does not expressly disclose cable extensions, that the material of the clamp body is harder than that of such an extension, or that the extension has a continuous broadening that is engaged with the inside surface.
- f. Sunderland discloses a clamping body (D, Fig. 1) having a passage receiving a wire end extension (C), the clamping body being harder than the material of the cable extension (p. 1, 53-54) and the extension engaging the body with a continuous broadening (C).
- g. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to provide the cables of Muller/Stubler with broadening cable extensions of a softer material than the clamping body, in order to provide the cable with more 'give' under increased tension while ensuring the cable is not pulled loose.

- h. The examiner notes that the broadened cable extension of the combination is engaged with the inside surface of the clamping bodies through the wedge 2.



Reproduced from Jackson

FIG. 2



Reproduced from Morell

13. Regarding claim 10, Jackson/Morell/Sunderland as modified above discloses a building protection system with conical clamping body, with the combination further

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disclosing wire cables capable of being accommodated at the roof (3 stored in 7; [0028]).

14. Regarding claim 11, Jackson/Morell/Sunderland as modified above discloses a building protection system with conical clamping body, with the combination further disclosing a frame structure outside the building (6) that offers a surface in which the wire cables can be accommodated (7).
15. Regarding claim 12, Jackson/Morell/Sunderland as modified above discloses a building protection system with conical clamping body, with the combination further disclosing profiles mounted on the roof that form cavities in which wire cables can be accommodated (7).
16. Regarding claim 13, Jackson/Morell/Sunderland as modified above discloses a building protection system with conical clamping body, with the combination further disclosing a clamping body that is translationally movably connected to the building (2; [0028]).
17. Regarding claim 14, Jackson/Morell/Sunderland as modified above discloses a building protection system with conical clamping body, with the combination further disclosing profiles (2) mounted on facades (8) and that can be rotated, swung, or moved translationally (2).
18. Regarding claim 15, Jackson/Morell/Sunderland as modified above discloses a building protection system with conical clamping body, with the combination further disclosing profiles (2) that cause the cables to be pulled out of storage places (7) and be placed under tension.

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- a. The examiner notes that claim 15 is considered to be a product-by-process claim. The patentability of the product does not depend on its method of production. Determination of patentability is based on the product itself. See MPEP 2113. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985).

19. Regarding claim 16:

- a. Jackson/Morell/Sunderland as modified above discloses a building protection system with conical clamping body, including profiles (2).
- b. Jackson does not expressly disclose that the profiles are essentially comprised of metal.
- c. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make Jackson’s profiles from metal, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.
- d. The examiner further notes that it would have been an obvious matter of design choice to modify the profiles by making them from metal, since applicant has not disclosed that metal profiles solves any stated problem or is for any particular purpose and it appears that the profiles of Jackson would perform equally well.

Response to Arguments

20. Applicant's arguments filed 09/02/09 have been fully considered but they are not persuasive.
21. Applicant argues that the requirement for new figures should be withdrawn. This argument is convincing with regard to Fig. 1. However, Figs. 2-7 are not accessible to one of ordinary skill. It is unclear where, if anywhere, the building is supposedly shown. Is the building represented by the cylinder? If so, how do wires running immediately along the surface of the building serve to protect it from airplanes; shouldn't these wires be spaced from the building? It is still unclear what is being illustrated and how the drawings relate to the claimed subject matter.
22. The examiner notes applicant's statement that a cable, when tensioned, deforms until it reaches its breaking point (p. 8, 6-8).
23. Applicant arguments directed to the obviousness of having a harder clamp than cable have been considered but are moot in view of the new ground(s) of rejection.
24. Applicant argues that no plastic deformation of cables is possible when held in the clamp of Stubler. However, once tensioned, a cable continues to deform plastically until it reaches its breaking point, as mentioned above.
25. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., wound up cable ends, claim 7) are not positively recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the

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specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). This is not claimed as a positive limitation, but rather as a preference.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRANON C. PAINTER whose telephone number is (571)270-3110. The examiner can normally be reached on Mon-Fri 7:30AM-5:00PM, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rich Chilcot can be reached on (571) 272-6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/B. C. P./
Examiner, Art Unit 3633
/Basil Katcheves/
Primary Examiner, Art Unit 3635